SPEED LETTER

DATE 3 September 1974

YES X NO

LETTER NO.

TO : D/L

ATTN:

FROM: OL/EO/BF

Mike - Re suggested strategy on OJCS air handlers:

O/Comp supports our view that operating components are responsible for funding utilities requirements for installations controlled by operating components. (Policy statement included in Budget Call FY 76 dated July 1974)

Within this frame of reference I suggest that OJCS shouldn't come to us with their funding problem--it should be presented to DD/A for resolution. I agree with Glenn that if we were to fund it from Engineering Support we would be establishing a bad precedent.

From the practical viewpoint I believe that Engineering Support probably has enough money to cover the job without jeopardy to any of our requirements.

Suggestion: Advise OJCS to present their problem to DD/A. At the same time we can informally advise DD/A that we can provide temporary help in meeting this funding problem. Since the fiscal year is just starting, we can fund the requirement. However, if at a later date we find we are in trouble because of the charge, we will look to DD/A to bail us out.

SIGNATURE

REPLY

DATE

P.S. I find it very hard to believe that as of 3 September 1974 with 10 months remaining in the FY that OJCS doesn't have the money.

ILLEGIB

See Air Handler - Rm 6C03

SIGNATURE

RESPONDER'S FILE

FORM 5-67 1831 USE PREVIOUS EDITIONS

3,472
,495

2 years @ #7 x 45,000 = #630,000
(#6 rental + .50 moving ea. way)
Renovations @ #10 = 450,000
1080,000
Say #1,000,000

Computer Center ESTIMATE South side first floor
based on 45000 sq. feet area.

Demolition Remove walls, ceilings, electric, hallway	$ 65,700
New ceiling 45,000 # luminous, air distribution	210,000
New SPV perimeter walls internal partition walls, steel windows	54.000
New partitions, fire barrier. fire barriers & subdivisions 25,000 #	40 000
New Doors. 900	7,200
Repaint existing walls.	2,000
Pedestal floor 45000 #.	200,000
	578 700
subtotal	579,000
to 60,000 #	200,
	~~972,000~~
HVAC	~~1,500,000~~ 1,675,0000
Electric & Telephone	760 000
Data grid extension	30,000
sub	2,270,000
	3,260
Total L & M direct cost.	# 2,869,000

972,000
675,000
760,000
30,000
2,437

3,260,000
Say 3,250

Contractors direct cost.	2,400	~~3,250~~ ~~2,869,000.00~~
10% security & commission on subs.	240	~~325~~ + 287,000.00
25% overhead & profit.	600	812 + 720,000.00
Estimated Award.	3,240	~~3,887~~ ~~3,876,000.00~~
Contingency ~~15%~~ 10		~~440~~ + 530,000
		4,827
Const Fund		4,456,000
		Say 4,800,000
GSA Design		332,300
A&E 7% +	336 270,000	
GSA review	45,100	
surveys & tests	7,100	
Reproduction	7,250	
Invitation	750	
Travel.	2,100	
	~~332,300~~	
	Say 400,000	
GSA Management		194,900
Supervision	187,500	527,200
material test	5000	1,800.
Travel	2400	400
		200
	~~194,900~~	5,400.
	Say 200,000	
TOTAL PROJECT		= ~~$~~ 4,983,700

$110+ psf.

45 1491.0
45
450
45
30

ESTIMATE COMPUTER CENTER.

DEMOLITION.

Remove ceiling 45,000 ft @ 10¢ wgt = 2 lbs = 90,000 lb $4,500

Remove light fixtures 1 @ 75 lb 600 @ $5.00 ea. $3,000

Remove Elec. conduit in clg & floor. 50¢ psf. $22,500

Remove Doors

Remove partitions metal 45 x 100 = 4500 @ 5.00 plf. $22,500
200 sf/room 100 sf/room

Remove masonry ptns 6" @ 50¢ psf. $ 8,000
650 lf x 16 = 10500 lb
300 x 16 = 4800
15,300 lb

15,300 lb = 7650 cf ≈ 300 cyds

43 #/sf = $\frac{15{,}300 \times 43}{2000} \approx 330$ ton

Rubbish Hauling = $5200

Masonry rubble = 330 ton	@ 10.00	8 mile haul	3300
ceeling	45 ton @	10.00 8	450
Electric			400
Haul lights & partitions to depot			1000
			$5150

L & M. Demolition total = $65,700

New Ceiling

Suspended ceiling incl susp.
acoustic & luminous grille & air distrib
1.70 1.05 ovhd 1.80
lighting = 380 psf. say $4.80 45000 x 4.80 $210,000

New SPV Perimeter Walls.

Internal, say 300 lin ft.
300 x 16 = 4800 sft 8" bk reinf. 380 psf. $15,000
plastic 4800 x 2 / 9 = 1100 sy @ 9 $10,000
paint 9600 sf @ 20¢ 2,000
27,000

New SPV Treatment @ Windows. 1/4" plate

grilles in place.
120 windows.
1/4" plate 5'-x8' = 40 sft. 420 lb. + frame 450 lbs.
120 x 450 = 54000 lbs. = 27 ton @ $1000 $27,000

10
54

page total = $264,000

Internal partitions

Allow 300 lf. per 6000 ft.

45 ÷ 6 = 7.5 x 300 = say 2400 linft.

2400 x 7 = 21,600 ft

Also fire barriers 100 linft / 5000 ft. 2 HR.

9 x 100 = 900 linft.; 900 x 16 = 14,400 ft

some duplication,

Assumes 25,000 ft GWB ptw. @ 140 — 35,000

painting 22,000 @ 20¢ (3 coats) — 4400

$39,400

Doors

1 per say 15' internal ptw.

say 3000 linft. 200 doors @ $350 each. — 7,000

46,400

Reprint External walls

640 linft.

300 / 940 say 1000 ft x 7 = 9000 ft. patch & paint 20¢ — 1,800

sheet total $48,200

Consolidation

COMPUTER CENTER CONSOLIDATIONS

Raised Floor: (increase 20% 4.50 to 5.25 for 12"

45,000 Sq. Ft. @ $4.00 per Sq. Ft. This floor will include Micarta tile, 36" pedestals, stringers, and supply grilles.	$ 200,000	240,000
Ventilation for 500 people X 15 c.f.m. = 6000 c.f.m. Convert A/C for humidification and ventilation (= 90 cfm/person ? 7500)	100,000	180,000 Reload Low
Chilled Water Grid: 500-Ton Chiller, Repipe Mechanical Room	925,000	200,000 High
Air Handlers 25 X $7,000 (7 x 25 = $175,000)		175,000 ~~200,000~~ ?
Cable Trays - 33,000 Linear Feet	275,000	$675,000 ~~275,000~~
TOTAL COST	$1,700,000	
G&A + 20%	340,000	
Profit + 15%	310,000	
TOTAL	$2,350,000	

Relocate entire area to first floor, north side $2,800,000

$ 450,000 difference

ELECTRICAL ESTIMATE

Quantity	Description	Cost/P. U.	Total
24	42 ckt. Panelboards	$1,100	$ 26,400
	Labor		13,200
6	Main Panel Breakers	3,000	18,000
	Labor		9,000
14,400'	4" Conduit (Installed	10	144,000
4,800'	4 - 500 MCM Cables (Installed)	11	158,400 −52,800 105,600
6,900'	4 - 250 MCM Cable (Installed)	5	40,500
	Smoke and Heat Detection		20,000
	Labor		10,000
	Centralized instrumentation to monitor equipment		100 000
	Halon Extinguisher System		50,000
	Labor		25,000
2,000	125V-15A Receptacles	13	26,000
	Labor		13,000
delete → 185	Window Plates (Steel)	65	12,000
	Labor		6,000
22,000'	#1/0 Cable to Receptacles	1	22,000
	Labor		11,000
200	Telephone Receptacles	11	2,200
	Labor		1,100
5,000'	Telephone Cable (Installed)	3	15,000
	15,000 KVA Transformer Capacity 480/208V		20,000
	Labor		10,000
	480V Switchgear		
	4 - AK-2-25 Breakers, & Panel Compartments, & Busing		17,000
	Labor		8,500
	TOTAL		$ 572,700
	Expenses & Inflation(20%)		114,600 → 135,700
			$ 687,300

678,300 − 18,000 steel plates. = 660,300 + 100 000 = 760 000

778,000 ← 678,300

< 814,000

ADDITIONAL COST FOR NORTH END

Quantity	Description	Cost/P. U.	Total
2,150'	3-750 MCM Cable (Installed)	$ 12	$ 27,800
650'	5" Conduit (Installed)	14	9,100
1	HV Switchgear & Cabinet		25,100
	TOTAL		$ 62,000
	C Vault Expansion		300,000
	SUBTOTAL		$ 362,000
	Expenses & Inflation(20%)		72,400
	TOTAL		$ 434,400

North cost diff.

A/C	450,000	
Elect	362,	
	712,000 say	700
Contractor @ 35%		105
		805
Contng. @ 10%		80
		885
	say	900
GSA @ 20%		180
		1080
	Say $	1,100,000